

DI
Cone

component that implements a replacement policy for said texture cache memory, and a direct memory access engine that retrieves texel data from memory.

52. (Amended) A texture mapping method using a texture cache system, said texture cache system including a texture cache memory, a replacement control component, and a direct memory access engine, comprising:

DS
D2

- (a) retrieving texels from memory via the direct memory access engine;
- (b) storing said retrieved texels in the texture cache memory in accordance with a replacement policy that is determined by the replacement control component; and
- (c) rendering a polygon using texels that are stored in the texture cache memory.

62. (Amended) A computer system, comprising:

a memory; and

a memory control that stores two-dimensional data in said memory, wherein said data is stored in said memory using an address that is formed by interleaving individual bit values of a coordinate in a first dimension with individual bit values of a coordinate in a second dimension.

DS
D3

66. (Amended) A texture caching method, comprising:

- (a) identifying a set of two-dimensional data that is to be transferred into memory; and
 - (b) storing said set of two-dimensional data in memory using an address that is formed by interleaving individual bit values of a coordinate in a first dimension with individual bit values of a coordinate in a second dimension.
- DS
D4